

What is claimed is:

1. In an audio output system for a vehicle having a stereo unit equipped with a deck for reproducing a compact disc(CD), an MP3 CD output system for the vehicle comprising:

5 a recording medium for recording audio data compressed according to an MP3(MPEG-1 audio layer 3) audio compression mode; and

10 an MP3 audio reproducing unit for performing communications with the stereo unit, inputting and restoring the compressed audio data reproduced through the deck, delaying the restored audio signal for a predetermined time, and converting the restored audio signal into an analog audio signal in a delayed order for an output.

15 2. The MP3 CD output system as claimed in claim 1, wherein the MP3 audio reproducing system includes:

an RF amplifier for amplifying an radio frequency(RF) signal reproduced by a pickup device of the deck;

20 a digital signal processor for signal-processing the RF signal amplified in the RF amplifier by frame unit and extracting only MP3 audio data according to a predetermined mode, in response to a control signal inputted from external;

a first decoder for correcting errors of the audio data extracted from the digital signal processor in response to the control signal inputted from the external;

25 a temporary memory for storing the audio data error-corrected in the first decoder for a predetermined time in response to the

control signal inputted from the external;

a second decoder for reading and restoring the error-corrected audio data from the temporary memory in response to the control signal inputted from the external;

5 an audio converter for converting the audio signal restored in the second decoder into an analog audio signal and outputting the analog audio signal to external speakers through the stereo unit;

a motor driver for driving a motor in response to a driving control signal inputted from the external; and

10 a central process unit(CPU) for controlling an entire system while performing intercommunications with the stereo unit.

3. The MP3 CD output system as claimed in claim 1, wherein the stereo unit and the CPU exchange information therebetween according to a serial control mode.

15 4. The MP3 CD output system as claimed in claim 3, wherein the serial control mode is an IIC communication mode.

5. The MP3 CD output system as claimed in claim 2, wherein the stereo unit and the CPU exchange information therebetween according to a serial control mode.

20 6. The MP3 CD output system as claimed in claim 5, wherein the serial control mode is an IIC communication mode.

7. The MP3 CD output system as claimed in claim 2, wherein the temporary memory stores as much audio data as several seconds, and outputs the stored audio data on a first-input first-output basis  
25 according to the control of the CPU.

8. The MP3 CD output system as claimed in claim 7, wherein the

stereo unit and the CPU exchange information therebetween according to a serial control mode.

9. The MP3 CD output system as claimed in claim 8, wherein the serial control mode is an IIC communication mode.

5        ~~10.~~ In an audio output system for a vehicle having a stereo unit equipped with a deck for reproducing a compact disc(CD), an MP3 CD output system for the vehicle comprising:

means for receiving from the deck and amplifying a pickup signal outputted from the CD on which MP3 data is recorded;

10        digital signal processing means for extracting a signal recorded on the CD by frame unit based on the pickup signal transferred from the amplifying means;

15        first decoding processing means for receiving the CD signal extracted by frame unit by the digital signal processing means and performing data error corrections;

temporary storage means for receiving the error-corrected CD signal from the first decoding processing means and storing the received CD signal for a predetermined time;

20        second decoding processing means for sequentially receiving the delayed CD signal from the temporary storage means and decoding the received delayed CD signal into audio data;

means for converting into an analog audio signal the audio data decoded in the second decoding processing means for an output;

25        means for outputting a driving signal for controlling a motor operating for the deck to extract the pickup signal from the CD;

and

means for receiving and transferring data from and to the stereo unit and other respective components and controlling an entire system.

11. The MP3 CD output system as claimed in claim 10, wherein the temporary storage means stores a received CD signal, delays the CD signal for a predetermined time, and sequentially outputs the delayed CD signal based on a received order according to the control of the control means.

00563 010094